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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,634	07/07/2003	James D. Coburn	98AB083-C	2199

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EXAMINER
LE, JOHN H

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 07/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 May 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-55</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-55</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>07 July 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Response to Amendment

1.   This office action is in response to applicant's response received on 05/10/2006.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 1, 23, 35, and 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real word" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S.519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993).

A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459. Nor can one patent "a novel and useful mathematical formula," Flook, 437 U.S. at 585, 198 USPQ at 195; electromagnetism or steam power, O'Reilly v. Morse, 56 U.S. (15 How.) 62, 113-114 (1853). To view the new guidelines for 35 U.S.C. 101, please view the following OG notice.

http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm

Regarding claims 1, 23, 35, and 47, they do not appear to provide a useful,

concrete and tangible result. Therefore, claims 23, 35, and 47 appear non-statutory.

Claims 2-22, 24-34, 36-46, and 48-55 are rejected under 35 U.S.C. 101 base on

dependency.

Double Patenting

4.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*,
418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

5.   Claims 1, 23, and 47 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 13, 16 of U.S.

Patent No. 6,618,856. Although the conflicting claims are not identical, they are not

patentably distinct from each other because claims 13 and 16 of prior art anticipate

claims 1, 23, and 47 of instant application as follows:

US Patent No. 6,618,856	Instant application
13. A control assembly (CA) set to be used with a compiler, a simulator and a controller, the controller for running execution code to provide output signals which, when linked to resources, cause the resources to cycle through requested activities, the simulator for receiving controller output signals and, in response thereto, generating motion pictures of resources as the resources cycle through the requested activities, the simulator using data structures which model the resources to determine which motion pictures to generate, the compiler for compiling resource information to generate execution code and data structures, the CA set including a separate information construct type for each resource, each CA type for encapsulating information required to generate execution code and at least a subset of the information required to generate a data structure for simulating a corresponding resource, the CA set comprising: a plurality of CAS, each CA including: a logic specification which specifies logic corresponding to the resources associated with the CA; and a simulation specification which specifies simulation information corresponding to the resources associated with the CA. 16. The set of claim 13 wherein a separate resource set corresponds to each CA, operation of a resource set corresponding to a specific CA type is dependent on both universal characteristics and circumstantial characteristics, universal characteristics being characteristics which are identical for all CAS of the specific type and circumstantial characteristics being characteristics which may vary from resource set to resource set and, wherein, the simulation specification specifies a characteristic subset of the universal and circumstantial characteristics.	1. A method for generating code and simulation information for use by a controller and a simulator, respectively, the method comprising the steps of: for at least one mechanical resource, encapsulating resource logic in a control assembly (CA); identifying at least one of the CAs corresponding to at least one resource; using the at least one identified CA instance to generate code for controlling the at least one resource; and using the at least one identified CA instance to generate simulation information. 23. A control assembly (CA) set for generating code and simulation information for use by a controller and a simulator, respectively, wherein, the controller runs the code to generate output signals for controlling at least one resource, the CA set comprising: at least one CA corresponding to at least one resource type, each CA including: a specification compilable to generate code for the corresponding resource type; and a specification useable to generate simulation information for the corresponding resource type. 47. A control assembly (CA) set for generating code and simulation information for use by a controller and a simulator, respectively, wherein, the controller runs the code to generate output signals for controlling at least one resource, the CA set comprising: at least one CA corresponding to at least one resource type, each CA including: material containing logic to facilitate the generation of code for the corresponding resource type; and simulation material useable to generate simulation information for the corresponding resource type.

Claims 13 and 16 of U.S. Patent No. 6,721,681 claimed control assembly (CA) set for generating code and simulation information by use a controller and a simulator corresponding resource type of claims 1, 23, and 47 of the present application.

Response to Arguments

6.   Applicant's arguments filed 05/10/2006 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1, 23, 35, and 47 have been considered but are moot in view of the new ground(s) of rejection.

Specifically Coburn et al. (USP 6,618,858) has been added to second ground of

rejection.

Contact Information

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John H. Le whose telephone number is 571 272 2275.

The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863

July 8, 2006

BRYAN BUI
PRIMARY EXAMINER